

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 26, 2000

TO: J. Kent Fortenberry, Technical Director

FROM: Paul F. Gubanc and David T. Moyle, Oak Ridge Site Representatives

SUBJ: Activity Report for Week Ending May 26, 2000

A. Y-12 Hydrogen Fluoride Supply System (HFSS): Under the current operating strategy, the HFSS does not provide double containment of HF during all modes of operation. While filling the vaporizer with liquid HF, some fraction of HF vapor (as much as 10% of the liquid charge) will be vented directly to the scrubber through a one inch vent line without secondary containment. A breach of the vent line could result in an unmitigated release. Recently, we suggested to LMES and DOE a simple potential solution to this conundrum. Isolate the vaporizer from the vent line and increase the nitrogen supply pressure on the HF cylinder to 40 psig. This approach has several benefits:

1. Double containment of HF can be maintained.
2. The increased nitrogen pressure would exceed the operational pressure of the heated HF, and thus give increased assurance that HF will not backflow into nitrogen piping.
3. No HF will be vented to the scrubber during normal operations, so any indication of increase in scrubber HF concentration (as measured by a conductivity probe) can be used as a defense-in-depth indication of a leak from the primary containment boundary.

The LMES HFSS Team Leader agreed to evaluate this change. (2-A)

B. Y-12 Project Management (PM): On Friday, Mr. Beck (DP-20) visited Y-12 during which the following PM issues were discussed but not resolved:

1. **EUO Restart** - It's been four weeks since most of the EUO subcontractors were released. As of Friday, LMES has still only found about 25 of the 60+ FTEs necessary to sustain current operations and move forward on some portions of Phase B restart. Additionally, EUO maintenance identified that many of its craft were running out of work due to a lack of prepared work packages and would reassign them to other work.
2. **HEU Materials Facility** - Mr. Beck was briefed on his desire to reduce the total estimated cost (TEC) from \$168M to \$120M (the currently approved TEC). Unfortunately, the brief identified only direct cost reductions and not whether costs would be redirected (e.g., overhead costs), deferred (e.g., installation of "spare" storage racks), or deleted. Also no evaluation was provided as to the life cycle costs of such changes (e.g., are deferred purchases more costly per unit). (DOE's independent review confirmed the \$168M TEC is consistent with the approved scope.)

3. **PM Corrective Action Plan** - LMES is preparing Revision 3 to the PM corrective action plan which delays many of the remaining commitments by several months. DOE and LMES were unable to explain to Mr. Gubanc how these delays impacted each of the modernization projects which are depending on these corrective actions to be completed (e.g., change control process).

We believe that these examples reveal that little has changed in the way DOE and LMES senior management approach project work. Commitments slip without accountability, changes in scope are shallowly evaluated, and DOE directed actions are not supported by DOE directed budgets. (2-A)

C. External Meeting: On Thursday, we briefed the Oak Ridge Local Oversight Committee (LOC) Board of Directors on the role of the DNFSB. The LOC Board is composed of local government officials and the LOC also has a Citizens Advisory Panel. The LOC provides advice to the DOE on matters affecting the area's physical and economic well-being. We were very well received.

cc: Board Members